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Survey of Chinese Historical Syntax

Part I: Pre-Archaic and Archaic Chinese

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Abstract

This is the first of two articles presenting a brief overview of Chinese historical syntax from the Pre-Archaic period to Middle Chinese. The phenomena under examination in the two papers are primarily aspects of pre-medieval grammar which differ markedly from modern Chinese varieties, specifically fronting of object NPs to preverbal position, the asymmetry between subject and object relative clause formation, and the encoding of argument structure alternations like active and passive. I relate each of these characteristics to morphological distinctions on nouns, verbs, or pronouns which are either overtly represented in the logographic writing system in Archaic Chinese or have been reconstructed for (Pre-)Archaic Chinese. In the second part of this series, I discuss the changes in the Archaic Chinese grammatical features and correlate these innovations with the loss of the (Pre-)Archaic Chinese morphology. The main goal of these articles is to highlight a common denominator, i.e. the morphology, which enables a systemic view of pre-medieval Chinese and the changes which have resulted in the striking differences observed in Middle Chinese and beyond.

1. Introduction

This paper is the first in a two-part series on grammatical features of Chinese from the earliest attested records over a millennium before the Common Era (BCE) to Middle Chinese of approximately the 5th century of the Common Era (CE). The first installment introduces characteristics of Pre-Archaic and Archaic Chinese which distinguish it from both Middle Chinese and modern Chinese varieties, in particular Standard Mandarin. I focus first on morphological phenomena relating to verb valence and case distinctions in the pronouns. I then discuss word order and suggest relationships between morphological case and movement transformations altering the basic SVO pattern. The sequel to this paper discusses changes that took place in Middle Chinese and the emergence of grammatical features familiar from Modern Standard Mandarin.

There is a long tradition of study on Pre-Archaic and Archaic Chinese word order; reconstructing derivational morphology and identifying its functions is likewise a major topic of inquiry. To my knowledge, however, the two lines of research have here-to-fore not been united in any fundamental way. I endeavor to posit in this paper that the key syntactic differences between (Pre-)Archaic Chinese and its descendants were the consequence of earlier morphosyntactic alternations and their subsequent loss. Due to the relative newness of this field of inquiry, some claims made in this paper must remain at the level of speculation. Nevertheless, relating the exotic (from the perspective of modern varieties) features of (Pre-)Archaic Chinese to now defunct morphological processes enables identification of a unifying theme in the pre-medieval synchronic grammar, in addition to providing morphological triggers accounting for the cascade of changes observed thereafter.

The following table sketches the subdivisions of the periods I am concerned with. The table loosely follows historical time periods, which I have included in parentheses.

(1) Periodization

Pre-Archaic:	14 th C. BCE – 11 th C. BCE	(Shang)
Early Archaic:	10 th C. BCE – 6 th C. BCE	(Zhou)
Late Archaic:	5 th C. BCE – 3 rd C. BCE	(Warring States)
Early Middle Chinese:	2 nd C. BCE – 2 nd C. CE	(Han)
Middle Chinese:	3 rd C. CE – 6 th C. CE	(Six Dynasties)
Late Middle Chinese:	7 th C. CE – 10 th C. CE	(Tang)

The divisions of Archaic Chinese are in rough agreement with Peyraube (1988), Wang (1958), and Chou (1963). These authors also agree on the existence of a major break at the beginning of the Han dynasty in the 2nd century BCE. A terminological difference, however, is their designation of the Han dynasty as Pre-Middle Chinese. I group this period solidly with Middle Chinese, because the key changes which characterize Middle Chinese are already clearly in evidence in the texts of this time. I am thus in agreement with Shi (2002) on dating the beginning of Middle Chinese to the beginning of the Han dynasty, but I have added internal divisions in the Middle Chinese period, which he does not include. This is primarily due to the existence of multiple changes, some observed in Early Middle Chinese and others emerging in the subsequent Six Dynasties period. All of the changes that I discuss in these articles are complete by the end of the Tang dynasty, this dynasty then marking the end of the Middle Chinese period.

2. Argument structure alternations and reconstructed morphology

One striking feature of Pre-Archaic and Archaic Chinese syntax is the ability of lexical roots to be used fairly freely as nouns, verbs, or adjectives, and for verbs to be used either transitively or intransitively without the apparent mediation of morphological marking. For example, the noun *bei* ‘back’ in (2a) is seen used as a transitive verb in (2b).

- (2) a. 鵬之背，不知其幾千里也。 (4th C. BCE; *Zhuangzi*, Xiaoyao)

Peng zhi **bei**, bu zhi qi ji qian li ye.

bird GENⁱ back not know 3.GEN how.many 1000 li NMLZ

‘The back of the great bird, (I) do not know how many thousands of *li* it is long.’

- b. 文公後背之。 (4th C. BCE; *Zhuangzi*, Daozhi)

Wen Gong hou **bei** zhi.

Wen lord later back 3.ACC

‘The Lord Wen later turned his back on him.’

Likewise, the transitive verb in (3a) is used intransitively (specifically, unaccusatively) in (3b).

- (3) a. 壞大門及寢門而入。 (5th C. BCE; *Zuo zhuan*, Cheng 10)

Huai da men ji qin men er ru.

break main gate and sleep gate CONJ enter

‘(He) broke down the main gate and the gate to the sleeping quarters and went in.’

b. 大室之屋壞。 (5th C. BCE; *Zuozhuan*, Wen 13)

Dashi zhi wu huai.

temple GEN roof collapse

‘The roof of the temple collapsed.’

The current view of alternations such as these in Chinese historical linguistics is that they reflect derivational affixation processes in Pre-Archaic and Archaic Chinese which were generally hidden by the logographic writing system. The alternations in (2) and (3) have been attributed by many to a voicing alternation of the initial consonant of the root (Karlgren 1933; Chou 1962; Wang 1965; Yu 1984; Norman 1988; Mei 1988, 1991; Jin 2006; Hong and Yang 2010; and others). In the case of (3), the voiced variant is the intransitive form. Following Karlgren (1933), Chou (1962:80) reconstructs the transitive form in (3a) with an unaspirated, voiceless /*k-/ and the intransitive form in (3b) with an aspirated, voiced /*g’-/. For the category alternation in (2), Karlgren (1933), reconstructs the noun in (2a) with a voiceless /*p-/ initial and the verb in (2b) with a voiced /*b-/ initial. In contrast, Pulleyblank (1973), Baxter (1992), and Baxter and Sagart (1998) date the voicing alternation to Middle Chinese and reconstruct an earlier sonorant consonantal prefix for (Pre-)Archaic Chinese.

The alternation in (3) has also been analyzed by a number of scholars as active (3a) and passive (3b) (Ma 1898, Cikoski 1978, Wei 1994, Qian 2004, and Shi 2008; Hong and Yang 2010). The passive sense is particularly salient if an agent is included in a PP following the intransitive verb. (4a) shows *zhi* ‘order/govern’ as a simple unaccusative verb with no agent. (4b) gives a transitive (causative) example. (4c) has the sense of a passive, with intransitive *zhi* followed by a PP agent.

(4) a. 民畏所以禁則國治矣。 (3rd C. BCE; *Hanfeizi* 18, Bajing)

Min wei suo yi jin ze guo zhi yi.

people fear REL by punish then nation order PERF

‘If the people fear that by which they are punished, then the nation will be orderly.’

b. 勞心者治人，

Lao xin zhe zhi ren,

work mind DET govern person

勞力者治於人。 (4th C. BCE; *Mencius*, Tengwen 1)

lao li zhe zhi **yu** ren.

work strength DET govern by person

‘Those who work with their minds govern (put to order) others; those who work with the strength of their bodies are governed by others.’

Toward the end of the Late Archaic period, the productivity of the “bare” passive declines, and passives come to be more overtly marked, for instance by the auxiliary *jian*, etymologically the verb ‘see’ (Wei 1994). The agent in a *jian* passive is expressed as a PP following the main verb.

(5) 吾長見笑於大方之家。 (4th C. BCE; *Zhuangzi*, Qiushui)

Wu chang **jian** xiao yu dafang zhi jia.

I always PASS laugh by enlightened GEN person

‘I would have always been laughed at by an enlightened person.’

Wei suggests that *jian* arose as a replacement for the morphological alternation, which had lost its productivityⁱⁱ. Viewed in this way, the replacement was a process of renewal at the end of a grammaticalization cycle. In grammaticalization processes (as first proposed by Meillet 1912), lexical categories lose their semantic content and become functional categories. These functional categories often in turn lose their independent status as free morphemes and become bound forms. Affixes are often subsequently eroded through sound change, after which their functions are passed on to new free forms, and the cycle is repeated.

To emphasize this possibility for Chinese passives, let me offer some more examples of (Pre-)Archaic affixes which have been lost through sound change, beginning with the causativizing (and sometimes denominalizing) prefix **s-* (Pulleyblank 1973, Mei 1989, Baxter and Sagart 1998, Jin 2006). The causative **s-* was responsible for the alternation seen between pairs like 吏 *li* ‘minor official’ and 使 *shi* ‘send (on official errand)’. Note the shared part of the character 吏, which indicates similarity in the pronunciation (at least in the root) in Pre-Archaic Chinese. The **s-* prefix attached to the liquid onset of the root, resulting in a consonant cluster that survived into Middle Chinese but is no longer segmentable in modern varieties.

Haudricourt (1954), Pulleyblank (1973), Mei (1988), Baxter (1992), Jin (2006), and others discuss the **-s* nominalizing suffix. This suffix became the departing tone in Middle Chinese. Modern Mandarin pronounces the verbal variant with a rising tone: 傳 *chuán* < *drjwen* < **drjon* ‘transmit’. The nominal variant is pronounced with the falling (departing) tone: 傳 *zhuàn* < *drjwenH* < **drjon-s* ‘something transmitted, record’ (reconstruction given by Baxter and Sagart 1998:55). The tone alternation survives in a number of words in Modern Mandarin but is no longer a productive process.

In this way, it should be clear that sound change has obscured morphological processes which were once productive in (Pre-)Archaic Chinese. For this reason, I suggest that the functions of the earlier affixes were transferred to analytic forms, e.g. auxiliary verbs, in a process of renewal. I suggest a similar cycle for marking embedded nominalizations in the following section.

3. Morphological marking for case and nominalization

In the previous section, we have seen evidence of morphological alternations in Pre-Archaic and Archaic Chinese that were hidden by the logographic writing system. In this section, I discuss some morphological marking which was overtly visible in the texts: case distinctions on pronouns, nominalization of embedded clauses, and the subject/object asymmetry in relative clause formation.

3.1. Morphological case on pronouns

I begin with case distinctions on pronouns. (6) summarizes the findings of Chou (1959), Yang and He (1992), and Zhang (2001) on the distribution of personal pronouns in the Pre-Archaic Chinese oracle bone inscriptions. Though the distinctions are no longer completely clear in the language, the tendencies do suggest a connection with case. For example, two of the first person pronouns tended to function as possessors, while the third was typically used in subject position. The possessor/non-possessor distinction is maintained in the second person pronouns as well. The connection with grammatical function is even sharper for third person pronouns. Notably, 之 *zhi* was never used in subject position.

(6) Oracle Bone Pronouns

- 1 我 *wo* (plural; can be possessor, subject, or object)
朕 *zhen* (singular; mostly as possessor, rarely as subject or object)
余 *yu* (singular; mostly as subject, rarely as object or possessor)
- 2 汝 *ru* (singular; similar to 1st person 余 *yu*)
爾 *er* (plural)ⁱⁱⁱ
乃 *nai* (only as possessor)
- 3 之 *zhi* (distal demonstrative; only as object or possessor)
茲 *zi* (proximal demonstrative; as subject, object, or possessor)

Most of these tendencies continued into the Early Archaic period. However, as Qian (2004) points out, number distinctions had mostly been lost by this time, first person *wo* and second person *ru* being used for plural and singular alike. The clearest grammatical function distinctions continued to be manifested in the 3rd person pronouns. According to Chou (1959) and Qian (2004), 厥 *jue*, and to a lesser extent 其 *qi*, were used predominantly as possessors in the Early Archaic period. 之 *zhi* was only found in object position. The demonstratives 是 *shi* and 時 *shi* were used in (though are not limited to) subject position. By the Late Archaic period, 時 *shi* and 茲 *zi* were no longer in common usage, having been replaced by 是 *shi* and 此 *ci* (proximal) and 比 *bi* (distal).

The third person pronoun 之 *zhi* was restricted to accusative case-marked positions in the Late Archaic period. In (7a), this pronoun functions as a direct object. It never appeared in subject position of a finite clause. The same form is found functioning as the genitive case

marker with a full NP possessor, as in (7b). Third person pronominal possessors were expressed by *qi*, as in (7c).

(7) a. 學而時習之，不亦說乎？ (5th C. BCE; *Analects*, Xue'er)

Xue er shi [xi **zhi**], bu yi yue hu?

study CONJ time practice 3.ACC not also joy Q

'To study and periodically practice something, is this not joyful?'

b. 先王之道 (5th C. BCE; *Analects*, Xue'er)

Xian wang **zhi** dao

former king GEN way

'ways of the former kings'

c. 其子焉往？ (4th C. BCE; *Mencius*, Lilou 1)

qi zi yan wang?

3.GEN son where go

'Where would their sons go?'

According to Djamouri (1999)^{iv}, the Pre-Archaic Chinese demonstrative *zhi* lost its deictic feature in the Archaic period and grammaticalized into a neutral determiner (or pronoun). It was from this time that it came to mark genitive case on NPs. Aldridge (2009) analyzes *zhi* in Late Archaic Chinese uniformly as a determiner in the head of DP. Given that both pronouns and genitive case reside in the D position, cross-linguistically, the dual function of *zhi* in Late Archaic Chinese is unsurprising. The analysis of *zhi* as the head of DP also offers some insight into focus constructions, which I discuss in section 4.

There is also reason to believe that Archaic Chinese had a dative pronoun. Dative pronouns surfaced in complement position of certain verbs, as can be seen in (8a). Here, the pronoun *yan* is used instead of the accusative *zhi*. (8b) shows that a full NP is accompanied by a dative preposition in this environment. It is widely recognized that *yan* is functionally equivalent to a 3rd person pronoun following the dative preposition *yu* (He 1989, Pulleyblank 1995, and others).

(8) a. 王不禮焉。 (5th C. BCE; *Zuo zhuan*, Yin 6)

Wang bu li yan.

king not respect 3.DAT

‘The king was not respectful toward him.’

b. 夫子禮於賈季。 (5th C. BCE; *Zuo zhuan*, Wen 6)

Fuzi li yu Jia Ji.

master respect to Jia Ji

‘The master is respectful toward Jia Ji.’

I will return to the distinction between accusative and dative pronouns in section 4. In section 3.2, I discuss embedded nominalized clauses and the subject/object asymmetry in relative clause formation.

3.2. Nominalized embedded clauses

Where a finite embedded clause is expected in English, we generally find a nominalization in Archaic Chinese. The nominalization is marked by genitive case on the embedded subject. (9a)

shows the complement of a verb of perception with a genitive pronoun as subject. (9b) shows a sentential subject with its subject as a full NP preceding the genitive case particle.

(9) a. 莫知其無形。 (3rd C. BCE; *Xunzi*, Tianlun)

Mo zhi [qi wu xing].

none know 3.GEN not.have form

‘No one knows that it does not have form.’

b. 天下之無道也久矣。 (5th C. BCE; *Analects*, Bayi)

[Tianxia zhi wu dao ye] jiu yi.

world GEN not.have way NMLZ long PERF

‘It is a long time since the world has been without the proper way.’

The lack of finite embedded clauses is related to another striking characteristic of Archaic Chinese syntax. Archaic Chinese employed separate strategies for forming relative clauses on subject position and VP-internal positions. In headless subject relatives, the clause is followed by the particle *zhe*, as in (10a). In a headed subject relative, the head NP follows the clause, and the genitive marker *zhi* functions as the linker between this NP and the modifying clause, as in (10b). In order to relativize on a VP-internal position, the particle *suo* appears between the subject and the predicate in the relative clause, regardless of whether the clause is headed or headless, as in (10c).

(10) a. 欲戰者可謂眾矣。 (5th C. BCE; *Zuo zhuan*, Cheng 6)

[[e Yu zhan] **zhe**] ke wei zhong yi.
desire fight ZHE POT say majority ASP

‘(Those) who desire to fight can be said to form the majority.’

b. 豈若從避世之士哉。 (5th C. BCE; *Analects*, Weizi)

qi ruo cong [e [bi shi] **zhi** shi] zai.
how like follow escape world ZHI scholar EXCL

‘How could that compare to following a scholar who escapes from the world?’

c. 人之所畏不可不畏。 (3rd C. BCE; *Laozi* 20)

[ren zhi **suo** [wei e]] bu ke bu wei.
person GEN SUO fear not POT not fear

‘[What people fear] cannot not be feared.’

Both *zhe* and *suo* have been widely studied in the literature, some regarding them primarily as pronominal forms (Ma 1898, Chou 1959, Wang 1962, Ma 1962, Lü 1982, Xu 1991) and others zeroing in on their transformational role and calling them nominalizers (Wang 1982, Yang and He 1992, Han 1995, Pulleyblank 1995, Zhang 1996, Yuan 1997, He 2004, and others). Zhu (1983) deserves particular recognition, however, for having pin pointed both the fundamental similarity shared by *zhe* and *suo* in forming relative clauses, as well as the principle difference between them in terms of the grammatical function of the gap inside the clause, i.e. that *suo* relativizes on VP-internal positions and *zhe* on subject position.

As to the reason for employing separate strategies for relativization of subject and object position, I suggest that this is due to the nominalized nature of the embedded clause. In

traditional generative linguistics from Chomsky (1977) on, relativization requires an operator at the edge of the embedded clause which semantically and syntactically identifies the gap within the clause. Both finite and nonfinite clauses can project a TP structure, which houses the subject and predicate, along with markers of tense and aspect. A verbal (i.e. non-nominalized) clause can additionally include a higher CP layer, which provides a peripheral position for material like relative operators, e.g. relative pronouns in English. *Which* in the following example moves from object position in the embedded clause to the edge of CP where it can be semantically linked with the head noun *book* via indexation.

(11) the book_i [_{CP} **which**_i [_{TP} I bought *e_i*]]

Zhe and *suo* played key roles in relative clause formation in Archaic Chinese. Because relative clauses in Archaic Chinese were nominalized, they did not project a CP layer. *Zhe*, which Aldridge (2009) analyzes as the determiner *n*, occupies a position external to the clause, from where it can be coindexed with a gap in subject position.

(12) 欲戰者
 [NP [_{TP} *e_i* [_{VP} *yu zhan*]] **zhe**_i]
 desire fight ZHE
 ‘(those) who desire to fight’

A separate strategy was required, however, for relative clauses formed on object position. Since there was no CP layer in the nominalized embedded clause, an operator was not able to move to

a position higher than the subject. Locality constraints^v likewise prevented binding between clause-external *zhe* and a gap inside VP. Consequently, it was necessary to place a relative operator in the edge of the VP itself to bind the gap in object position. This edge of VP is the extended verbal projection *vP*, and the operator housed there was *suo*.

(13) 人之所畏

[_{NP} ren zhi [_{vP} **suo**_i [_{VP} wei e_i]]]

person GEN SUO fear

‘what people fear’

In this way, the subject/object asymmetry in Archaic Chinese relative clause formation can be seen to follow directly from the morphological properties (i.e. the nominalization) of the embedded clauses themselves. In the sequel to this article, I show how the loss of nominalizing morphology correlated with the loss of this asymmetry and the emergence of the modern uniform relativization strategy.

One final point I will make here regarding (Pre-)Archaic Chinese clausal nominalization is that overt marking (in the writing system) is not observed until the Archaic period. Both examples in (14) are formed on object position. But no *suo* appears; nor is there a genitive marker on the embedded subject or between the clause and head noun. The following examples are from an Early Archaic text (approximately 8th century BCE).

(14) a. 天不庸釋于文王受命。 (Shangshu, Junshi)

Tian bu yong shi yu Wen Wang shou ming.

Heaven not then relinquish to [[Wen king receive] **destiny**]

‘Then Heaven will not relinquish [the destiny which King Wen received].’

b. 非時伯夷播刑之迪？ (Shangshu, Luxing)

Fei [[shi Boyi bo] **xing**] zhi di?

not.be then Boyi promulgate law GEN guide

‘Is it not the laws promulgated by Boyi which guide (you)?’

Zhe and *suo* became obligatory in subject and object relative clauses, respectively, in the Late Archaic period. There is also a gradual increase in genitive marking of embedded subjects in object relative clauses through the Late Archaic period. Bearing this in mind, I would like to suggest the following speculative account of the emergence of *zhe* and *suo* and genitive marking on embedded subjects in Archaic Chinese. Given that the residual evidence of case morphology in Pre-Archaic Chinese was no longer completely clear in the oracle bone inscriptions, I suggest that earlier inflections may have been in the process of being lost through sound change. The same reasoning could also apply to morphology marking relativization and nominalization. Earlier synthetic forms, which had become opaque as the result of sound changes, were replaced in the Archaic period with analytic morphemes, i.e. *zhe*, *suo*, and the genitive marker *zhi*, in another process of renewal in the grammaticalization cycle. In the following section, I suggest how morphological marking for case and nominalization may account for otherwise mysterious movement transformations in Late Archaic Chinese. One of these – object focus fronting – provides additional evidence for renewal of nominalization morphology.

4. Word Order

In this section, I examine several types of word order alternation: object focus fronting, pronoun fronting in the context of negation, and *wh*-movement. I show that the first are clearly related to morphosyntactic properties of the grammar: embedded nominalization in the case of focus fronting and case morphology for pronoun fronting. The morphological connection with *wh*-movement is less clear. In the second part of this article, however, I suggest an indirect connection with focus fronting that accounts for the loss of *wh*-movement.

Basic word order from Pre-Archaic to Late Archaic Chinese was SVO. Note in the following Pre-Archaic example involving conjoined VPs that both objects follow their respective verbs.

(15) 王比望乘伐下危 (14th – 11th century BCE: Heji 6476; from Djamouri et al., to appear)

wang *bi* wang cheng *fa* xia wei

king follow Wang Cheng fight Xia Wei

‘The king will follow Wang Cheng to fight Xiawei.’

Various other derived word orders are also found in (Pre-)Archaic Chinese. One of these is focus fronting. In the Pre-Archaic Chinese oracle bone inscriptions, a focused object is preceded by the focalizing copula *wei*. The main verb follows the fronted object. Djamouri et al. (to appear) analyze these focus constructions in the Pre-Archaic Chinese oracle bone inscriptions as clefts. This is a reasonable conclusion, given the obligatory presence of the copula.

(16) 王勿唯龍方伐 (14th – 11th century BCE; Heji 6476; from Djamouri et al., to appear)

wang wu *wei* **long** **fang** fa

king must.not be Long tribe fight

‘It must not be the Long tribe that the king will fight.’

Focus fronting continued into the Archaic period. There are, however, differences between Pre-Archaic and Archaic Chinese focus constructions. First, the copula was obligatory in Pre-Archaic Chinese (Wang 1958, Zhang 2001) but became optional in the Early Archaic period. The copula is seen in (17a) but not in (17b). Another difference was the requirement of either *zhi* or *shi* following the preposed object.

(17) a. 彼唯人言之惡聞。 (4th C. BCE; *Zhuangzi*, Zhile)

Bi *wei* ren yan **zhi** wu [wen t].

it COP human voice GEN hate hear

‘It only hates to hear human voices.’

b. 君亡之不恤，而敗臣是憂，惠之至也。 (5th C. BCE; *Zuo zhuan*, Xi 15)

Jun *wang* **zhi** bu xu, er

lord exile 3.ACC not concern CONJ

bai *chen* **shi** you, hui zhi zhi ye.

defeat minister DEM worry, benevolence GEN extreme COP

‘Our lord is concerned not for his own exile but for his defeated ministers. This is benevolence in the extreme.’

Wang (1958), Huang (1988), Feng (1996), Wei (1999) analyze *zhi* and *shi* as resumptive pronouns on the basis of the fact that *zhi* and *shi* functioned otherwise as pronouns in Archaic Chinese, as I discussed in the previous section.

(18) a. 學而時習之 (5th C. BCE; *Analects*, Xue'er)

Xue er shi [xi **zhi**
study CONJ time practice 3.ACC

'To study and periodically practice something....'

b. 以是始賞，天啟之矣。(5th C. BCE; *Zuozhuan*, Min 1)

[Yi **shi** shi shang] tian qi zhi yi.
with DEM begin award Heaven aid 3.ACC ASP

'If the award begins with this, then Heaven has aided him.'

However, the continuity from Pre-Archaic Chinese is better captured by analyzing *zhi* and *shi* as markers of the embedded nominalization in the cleft construction, as proposed by Meisterernst (2010)^{vi} and Ding (1983)^{vii}. Thus, (17a, b) are analyzed as embedded nominalized clauses, with the fronted object in the position before the genitive marker *zhi* or demonstrative *shi*. The emergence of *shi* and *zhi* in Archaic Chinese focus constructions, then, is viewed as additional evidence for the renewal of genitive marking in embedded nominalizations mentioned at the end of section 3.

(19) 彼唯人言之惡聞。 (4th C. BCE *Zhuangzi*, Zhile)

Bi *wei* [NP ren yan_i **zhi** [VP wu wen e_i]].

it COP human voice GEN hate hear

‘It only hates to hear human voices.’

Direct evidence for the nominalization comes from negation. Only the negator used with nominal predicates could be used to negate these focus constructions, as pointed out by Yin (1985) and Meisterernst (2010). (20a) shows this negator with a simple nominal predicate. (20b, c) show the negator used in focus constructions. This suggests that the string beginning with the focused NP forms a single nominal constituent.

(20) a. 非吾徒也。 (5th C. BCE; *Analects*, Xianjin)

Fei *wu tu ye*.

not.be 1 student COP

‘(He) is not my student.’

b. 今王非越是圖。 (5th-3rd C. BCE; *Guoyu*, Wu; from Meisterernst 2010:79)

Jin wang **fei** *Yue shi tu*.

now king not.be Yue DEM plan

‘Now, it is not Yue that the king is concerned with.’

c. 非此之謂也。 (5th-3rd C. BCE; *Guoyu*, Chu 2; from Meisterernst 2010:80)

Fei *ci zhi wei ye*.

not.be this GEN mean COP

‘This is not the meaning of it.’

Furthermore, if *zhi* and *shi* were resumptive pronouns, they would be expected to appear in argument position following the verb, as pointed out by Ding (1983), who credits Ma (1898) for the initial observation. Topicalized objects were resumed by pronouns in Archaic Chinese, and these resumptive pronouns occurred in argument position within the VP. *Zhi* can be seen in object position doubling the fronted topic in the following example.

(21) 子路，人告之以有過。 (4th C. BCE; *Mencius*, Gongsun Chou 1)

Zilu, ren gao **zhi** yi you guo.

Zilu person tell 3.ACC that have error

‘Zilu, someone told him he made a mistake.’

A uniform analysis of both *shi* and *zhi* also makes sense from a formal perspective. In the previous section, I sketched the diachronic evolution of *zhi* from demonstrative to personal pronoun and genitive marker. Given that *shi* was also a demonstrative pronoun, it too would occupy the head of DP. Consequently, it could have undergone the same change as *zhi* to genitive marker in the early Archaic period. The competition between them was resolved in the Late Archaic period, with *zhi* emerging as the sole genitive case marker.

Another context where object fronting is observed in Pre-Archaic and Archaic Chinese is negated sentences when the object is a pronoun. The object pronoun fronts to a position right-adjacent to the negator. The following pair are from the oracle bone inscriptions, but this word order alternation survived through most of the Archaic period.

(22) a. 祖辛害我？

Zu Xin hai **wo**.

ancestor Xin harm us

‘Does ancestor Xin harm us?’

b. 祖辛不我害？ (14th – 11th century BCE; Heji 95; Zhang 2001:148)

Zu Xin *bu* **wo** hai.

ancestor Xin not us harm

‘Does ancestor Xin not harm us?’

Djamouri (1991, 2000) proposes that pronoun fronting in the context of negation like (23b) is structurally analogous to the examples of focus fronting discussed above and analyzes both constructions as clefts. However, such an approach leaves unexplained the fact that only pronouns underwent this fronting. It would be surprising for only prosodically weak constituents like pronouns to exhibit this behavior, while phrasal NPs were exempt.

Before discussing an alternative account of pronoun fronting, let me first mention the final context in which objects surfaced in a position between the subject and VP: Archaic Chinese *wh*-movement. Note the preverbal position for the object *wh*-word in the first clause of (23) and the postverbal non-interrogative object in the second clause.

(23) 吾誰欺？欺天乎？ (5th C. BCE; *Analects*, Zihan)

Wu **shei** *qi*? Qi tian hu?

I who deceive deceive Heaven Q

‘Who do I deceive? Do I deceive Heaven?’

Textual evidence for *wh*-fronting first appears in Early Archaic Chinese. But this does not necessarily mean that Pre-Archaic Chinese lacked *wh*-movement. *Wh*-questions are simply unattested in the oracle bone inscriptions (Zhang 2001, Qian 2004). This is unsurprising, given the nature of the texts, which record *yes/no* questions directed at the spirits for the purposes of divination. In the majority of cases, a statement was offered to the spirits, who were asked for a sign as to whether the proposition was auspicious (Zhu 1990). For obvious reasons, the spirits could not be called upon to supply specific names, places, times, and the like. Therefore, it is not surprising that no *wh*-questions appear in the inscriptions.

Feng (1996) proposes that both pronoun fronting to negation and *wh*-movement should be analyzed as prosodic cliticization^{viii}, pronouns right-adjoining to the negator and *wh*-words left-adjoining to the verb. This approach solves the problem of why only pronominal constituents underwent these types of movement, given that pronouns are monosyllabic, prosodically weak elements. The vast majority of *wh*-questions in Archaic Chinese also involved non-phrasal, monosyllabic *wh*-words.

Aldridge (2010) points out, however, that subsuming *wh*-movement and pronoun fronting to negation under the same rubric of cliticization ignores certain systematic asymmetries between the two. For example, objects of prepositions underwent *wh*-fronting, as in (24a). However pronouns did not front to negation from PPs, as can be seen in (24b).

(24) a. 王誰與為善？ (4th C. BCE; *Mencius*, Tengwen 2)

Wang shei [yu e] wei shan?

king who with do good

‘With whom would the king behave properly?’

b. 齊人莫如我敬王。 (4th C. BCE; *Mencius*, Gongsun Chou 2)

Qi ren mo [ru wo] jing wang.

Qi person none like I respect king

‘Of the people of Qi, none respect the king as I do.’

Furthermore, *wh*-fronting could also target phrasal categories. The landing site for the movement also preceded negation, which is not predicted on Feng’s analysis, since he claims that *wh*-words adjoin to the verb and consequently should follow negators.

(25) 何城不克？ (5th C. BCE; *Zuozhuan*, Xi 4)

He cheng bu ke?

what city not conquer

‘What city would (you) not conquer?’

In contrast to the prosodic approach, Wei (1999), Herforth (2003), and Aldridge (2010) argue for a syntactic movement analysis of *wh*-fronting. Aldridge (2010) argues specifically that internal argument *wh*-phrases moved to the edge of the extended verbal projection *vP*. Late Archaic Chinese is then like Hungarian (as proposed by Kiss 1987, 1995, Farkas 1986, and Horvath

1995), Malayalam (Jayaseelan 2001), Chadic (Tuller 1992), Atayalic languages (Aldridge 2004) in having a clause-medial position for interrogative constituents.

(26) 我將何求？ (5th C. BCE; *Zuozhuan*, Xi 28)

[_{TP} *Wo* *jiang* [_{VP} *he* [_{V'} *t_{wo}* [_{V'} *qiu* *t_{he}*]]]]]?

I will what ask.for

‘What will I ask for?’

Some doubt also must be raised regarding the cliticization analysis of pronoun fronting to negation. The first problem is that this approach leaves open the question of why it is only negation which triggers this fronting. A prosodic approach also does not account for asymmetries like the following. The negator and pronoun are identical in the two examples; only the verb is different.

(27) a. 我饑而不我食。 (3rd C. BCE; *Lü Shi Chunqiu* 12.5)

Wo *ji* *er* *bu* **wo** *si* ____ .

1 starve CONJ not 1 feed

‘When I was starving, (they) did not feed me.’

b. 制不在我。 (5th-3rd C. BCE; *Guoyu*, Jin 2)

Zhi *bu* *zai* **wo**.

control not be.in 1

‘The control is not within me.’

Bear in mind now the discussion in section 3 that showed that 3rd person pronouns in Late Archaic Chinese were distinguished for accusative, genitive, and dative case. Interestingly, the dative pronoun never underwent fronting to negation.

(28) 晉國天下莫強焉。 (4th C. BCE; *Mencius*, Lianghui 1)

Jin Guo Tianxia mo qiang **yan**.

Jin nation world none strong 3.DAT

‘The Jin nation, in the world, noone is stronger than them.’

Returning to the alternation in (27), the verb in the example lacking fronting was a dative case assigning verb.

(29) 先君之廟在焉。 (*Lü Shi Chunqiu* 15.4)

Xian jun zhi miao **zai** yan.

former lord GEN shrine be.in 3.DAT

‘The former lord’s shrine is there.’

What we can conclude from this discussion is that only pronouns needing accusative case underwent fronting to negation. Pronouns with inherent case, like dative, could remain in their base positions. One way to capture this is to say that negation cancels a verb’s ability to assign structural accusative case to its object. The object must then move to a position where it can receive case^{ix}. Verbs which assign inherent case will be unaffected, and the object is licensed with inherent case, as usual. Viewed in this way, Archaic Chinese pronoun fronting to negation

is reminiscent of genitive marking of objects in the scope of negation in Slavic languages like Russian and Polish. In the following Russian example, the object receives genitive case in the scope of sentential negation.

- (30) Anna *ne* kupila **knig**.
Anna.NOM NEG bought books.GEN
'Anna did not buy any books.' (Harves 2002:97)

The principle difference between Late Archaic Chinese and Russian is in the morphological requirements of NPs. In Late Archaic Chinese, full NP objects could be licensed by the inherent (genitive) case, as in Russian. Accusative pronouns, on the other hand, needed to undergo object shift in order to receive this structural case^x.

To sum up this section, I have proposed morphological motivations for object focus fronting and pronoun fronting to negation. These analyses have advantages over previous approaches, not only in having wider empirical coverage, but also in being able to derive the motivations for the movements from other properties of the grammar, specifically morphology for case and nominalization. *Wh*-movement does not seem to be related to morphology in any obvious way. However, I suggest an indirect relationship in the sequel to this article which contributed to its loss.

Finally, let me point out that empirically motivated transformational analyses, coupled with clear morphological motivations, takes us further to understanding the fundamental nature of word order alternations in the language. [The existence of object fronting transformations has prompted many scholars in the past to conclude that basic word order of Pre-Archaic Chinese](#)

may historically have been SOV and not SVO (Wang 1958, Li and Thompson 1974, Yu 1981, La Polla 1994, Feng 1996, Xu 2006, and others). This proposal faces an obvious challenge, however, from the fact that preverbal objects are found only in very specific pragmatic and/or syntactic contexts and therefore are not instantiations of basic word order, as pointed out by Peyraube (1996), Huang (1988), Shen (1992), Djamouri (2005), Djamouri and Paul (2009), Meisterernst (2010), Aldridge (2012) and others. The identification of the morphological properties of these constructions reveals even more clearly the fact that OV and VO orders are not simple mirror images of each other in terms of reordering of the object around the verb.

5. Conclusion

In this paper, I have shown at least in part how morphological alternations in (Pre-)Archaic Chinese account for key features of the syntax of this language which distinguish it from the modern varieties. In the sequel article on Middle Chinese, I show how the loss of these syntactic characteristics in turn correlates with the loss of the morphological alternations as productive processes, thus providing additional evidence (albeit indirect) for the relationship between the morphology and the syntax, as well as illuminating possible triggers for the changes which are observed in the Early Middle Chinese period.

ⁱ The glosses used in this article are as follows:

ACC = accusative

ASP = aspect

CONJ = conjunction

COP = copula

DAT = dative

DEM = demonstrative

DET = determiner

EXCL = exclamation

GEN = genitive

NEG = negation

PASS = passive

PERF = perfective

POT = potential

Q = question particle

REL = relativizer

ⁱⁱ Tang and Zhou (1985) assume that bare passives are truly bare and do not involve any overt morphological alternation with their active counterparts. The motivation for their replacement by *jian* passives, then, is due to inability of the PP agent to sufficiently express the passive voice. However, if this is true, then it begs the question of how the ‘bare’ passive ever came into existence and survived for several centuries as a passive form.

ⁱⁱⁱ Yang and He (1992) do not include this pronoun in their list of pronouns in the oracle bone inscriptions. Zhang (2001) cites only two instances. Interestingly, he points out that it shares its rhyme with its 1st person counterpart, suggesting additional morphological complexity in the pronoun system.

^{iv} See also Wang (1958), Chou (1959), and Yue (1998) for additional discussion of the etymology and historical development of *zhi*.

^v Specifically, the Phase Impenetrability Condition of Chomsky (2000, 2001, 2004, 2008).

^{vi} Meisterernst (2010) cites some asymmetries between the *shi* and *zhi* focus constructions. For example, *zhi* can be followed by a negated predicate, while *shi* cannot. She accommodates these differences by placing *shi* in a lower functional projection, directly selecting the VP which it nominalizes, and *zhi* in a position above aspect and negation. Therefore, *zhi* is claimed to nominalize a larger constituent than *shi*. However, the nominalizing function is common to both.

^{vii} Ding credits Ma (1898) with the original proposal that *shi* and *zhi* function as nominalizing subordinators in focus constructions.

^{viii} Shi and Xu (2001) propose an alternative cliticization approach by analyzing Archaic Chinese *wh*-words as Wackernagel-type second position clitics. See Aldridge (to appear) for a critique of this analysis.

^{ix} This is essentially object shift for structural case assignment. Movement for structural licensing of internal arguments has been widely proposed in the literature (cf. Tenny 1987, 1994; Van Voorst 1988; Runner 1993; Borer 1994; Bittner 1994; Benua 1995; Ritter and Rosen 2000; Spreng 2006; and others).

^x The traditional approach to genitive of negation in Slavic languages assumes that the source of genitive case is the negator itself (Pesetsky 1982, Bailyn 1997, Brown 1999, Harves 2002, and Witko 2008). However, Harves (2002) is in agreement with the current proposal in that the Neg head selects a defective ν P, rendering ν unable to value accusative case. Brown (1999), Kim (2003, 2004), and Basilico (2008) agree with the current approach in proposing that an object must move in order to value structural case.

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